GlideScope Matches Flexible Fiber-Optic Scope for Intubation in Obese Patients

In this small study, time to intubation, number of attempts, success rate, and incidence of complications were comparable.

A flexible fiber-optic scope (FFOS) often is used to intubate obese patients, but fiber-optic intubation requires training and practice. Researchers compared intubation performance of the GlideScope video laryngoscope and the FFOS in 75 obese patients (body-mass index $\geq 30 \text{ kg/m}^2$) undergoing elective surgery. After induction of anesthesia, patients were randomly assigned to one of the two methods; all intubations were performed by two experienced anesthesiologists.

There were no significant differences between the GlideScope and FFOS groups in time to intubation (median, 37 and 43 seconds), intubation difficulty (median scores on a 100-mm visual analog scale, 15 and 20), first-attempt success (95% and 86%), or incidences of hypoxemia ($\text{SaO}_2 < 90\%$; 11% and 5%), postintubation bleeding (3% and 3%), or sore throat (43% and 47%). Intubation failed (attempt lasting >180 seconds) in one patient in each group; both patients were successfully intubated with the alternate device.

Comment: These experienced operators achieved intubation with a flexible fiber-optic scope much faster (and likely with greater success) than less-experienced operators could expect. The real news here is that the GlideScope, which is much easier to learn and to use than the FFOS, matched the FFOS in overall performance in these obese patients with difficult airways. For less-experienced operators, the GlideScope likely is an easier alternative to an FFOS for intubation in obese patients.

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Dr. Walls has provided testimony in a patent infringement suit in Scotland on behalf of Verathon, Inc., manufacturer of the GlideScope video laryngoscope.

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